

AMENDMENTS TO THE CLAIMS

1. **(Currently amended) Apparatus** An apparatus for the treatment of corneal neovascularization, or the accumulation of vessels on the conjunctiva in a patient in need thereof, ~~characterised in that it comprises~~ comprising a therapeutic light source (2) that is designed to emit a therapeutic light beam having a wavelength between 1.2 μm and 1.3 μm , wherein said therapeutic light beam is sufficient to treat corneal neovascularization, or the accumulation of vessels on the conjunctiva in said patient.

2. **(Currently amended) Apparatus** The apparatus according to claim 1, ~~characterised in that~~ wherein said source (2) is designed to emit a pulsed therapeutic light beam.

3. **(Currently amended) Apparatus** The apparatus according to claim 2, ~~characterised in that~~ wherein the time of each pulse is adjustable.

4. **(Currently amended) Apparatus** The apparatus according to claim 2, ~~characterised in that~~ wherein the time of each pulse can be set to a value less than 0.5 s, ~~and preferably to a value between at least 0.1 s and 0.3 s.~~

5. **(Currently amended) Apparatus** The apparatus according to claim 2, ~~characterised in that~~ wherein the time interval between two pulses is adjustable.

6. **(Currently amended) Apparatus** The apparatus according to claim 5, ~~characterised in that~~ wherein the time interval between two pulses can be set to a value greater than 0.5 s, ~~and preferably to a value greater than or equal to 0.9 s.~~

7. **(Currently amended) Apparatus** The apparatus according to ~~one of claims~~ Claim 2 ~~1 to 6~~, ~~characterised in that~~ wherein the time of emission or the number of pulses in each emission of the therapeutic light beam is adjustable.

8. **(Currently amended) Apparatus** The apparatus according to claim 2 ~~and claim 7~~, ~~characterised in that~~ wherein the number of pulses in each emission can be set to at least between 50 and 300.

9. **(Currently amended) Apparatus** The apparatus according to ~~one of claims~~ Claim 1 ~~to 8~~, ~~characterised in that~~ wherein the power of the therapeutic light beam is adjustable.

10. **(Currently amended) Apparatus** The apparatus according to claim 9, ~~characterised in that~~ wherein the power of the therapeutic light beam can be set to at least between 1 W and 5 W.

11. **(Currently amended) Apparatus** The apparatus according to claims 2 ~~or and~~ 9, ~~characterised in that~~ wherein the power density of the pulses can be set to at least between 30 W/cm² and 300 W/cm².

12. **(Currently amended) Apparatus** The apparatus according to ~~one of claims~~ Claim 1 to 11, ~~characterised in that~~ wherein the source (2) is a laser source.

13. **(Currently amended) Apparatus** The apparatus according to claim 12, ~~characterised in that~~ wherein the laser source (2) comprises a Raman fiber laser.

14. **(Currently amended) Apparatus** The apparatus according to claim 13, ~~characterised in that~~ wherein the Raman fiber laser includes a pump laser diode (201), an ytterbium-doped fiber ~~fi~~bre laser (202), and a Raman converter (204) that is intended to transpose the wavelength of the beam generated by the ytterbium-doped fiber ~~fi~~bre laser.

15. **(Currently amended) Method** A method for treatment of corneal neovascularization or the accumulation of vessels on the conjunctiva in a patient in need thereof, ~~characterised in that~~ comprising illuminating the site of the cornea or limbus to be treated in the case of corneal neovascularization, or the site of the conjunctiva to be treated in the case of the accumulation of vessels on the conjunctiva, ~~is illuminated~~ with a therapeutic light beam having a wavelength between 1.2 μ m and 1.3 μ m, wherein said therapeutic light beam is sufficient to treat corneal neovascularization, or the accumulation of vessels on the conjunctiva in said patient.

16. **(Currently amended) Treatment** The treatment method according to claim 15, ~~characterised in that~~ wherein the therapeutic light beam is a laser beam.

17. **(Currently amended) Treatment** The treatment method according to claim 15 ~~or~~ 16, ~~characterised in that~~ wherein the therapeutic light beam is pulsed.

18. **(Currently amended) Treatment** The treatment method according to claim 17, ~~characterised in that~~ wherein the pulse fluence is between 1 J/cm² and 30 J/cm².

19. **(Currently amended) Treatment** The treatment method according to claim 17 ~~or~~ 18, ~~characterised in that~~ wherein that the time (T) between two successive pulses is greater than 0.5 s.

20. **(Currently amended) Treatment** The treatment method according to claim 17 ~~or~~ 18, ~~characterised in that~~ wherein the time (T) between two successive pulses is greater than or equal to 0.9 s.

Int. Appl. No. : PCT/EP2005/000127
Int. Filing Date : January 10, 2005

21. (Currently amended) ~~Treatment~~ The treatment method according to ~~one of~~ claims Claim 17 to 20, characterised in that wherein the number of pulses (N) in each emission is between 50 and 300 pulses.

22. (Currently amended) ~~Treatment~~ The treatment method according to ~~one of~~ claims Claim 17 to 21, characterised in that wherein the time (t) of each pulse is less than 0.5 s.

23. (Currently amended) ~~Treatment~~ The treatment method according to ~~one of~~ claims Claim 17 to 21, characterised in that wherein in that the time (t) of each pulse is between 0.1 s and 0.3 s.

24. (Currently amended) ~~Treatment~~ The treatment method according to ~~one of~~ claims Claim 15 to 23, characterised in that wherein the power density (d) of the therapeutic light beam at the level of the site to be treated is between 30 W/cm^2 and 300 W/cm^2 .

25. (Currently amended) ~~Treatment~~ The treatment method according to ~~one of~~ claims Claim 15 to 23, characterised in that wherein the power density (d) of the therapeutic light beam at the level of the site to be treated is substantially equal to 100 W/cm^2 .

26. (Currently amended) ~~Treatment~~ The treatment method according to ~~one of~~ claims Claim 15 to 25, characterised in that wherein the total fluence for each emission is between 6000 J/cm^2 and $90,000 \text{ J/cm}^2$.

27. (Currently amended) ~~Treatment~~ The treatment method according to ~~one of~~ claims Claim 15 to 25, characterised in that wherein the total fluence for each emission is substantially equal $30,000 \text{ J/cm}^2$.

28. (Currently amended) ~~Treatment~~ The treatment method according to ~~one of~~ claims Claim 15 to 27, characterised in that wherein the operation of lighting the site to be treated is repeated a number of times, with at least one day of rest between each lighting operation.

29. (Currently amended) ~~Treatment~~ The treatment method according to ~~one of~~ claims Claim 15 to 28, characterised in that wherein no products are administered to the patient.

30. (New) The apparatus according to claim 4, wherein the time of each pulse can be set to a value between at least 0.1 s and 0.3 s.

31. (New) The apparatus according to claim 6, wherein the time interval between two pulses can be set to a value greater than or equal to 0.9 s.